25X1

TOP SECRET

RCA-03/0018/69

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Basic Imagery Interpretation Report

NATIONAL
PHOTOGRAPHIC
INTERPRETATION
CENTER

25X1

[redacted]

ELISENVAARA LOW ALTITUDE AIR WARNING RADAR FACILITY

25X1

[redacted]

DEPLOYED COMM/ELEC/RADAR FACILITIES
USSR
APRIL 1969

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25X1 [redacted] TOP SECRET [redacted] RCA-03/0018/69 25X1 [redacted]

INSTALLATION OR ACTIVITY NAME		COUNTRY
Elisenvaara Low Altitude Air Warning Radar Facility		UR
UTM COORDINATES: NA	GEOGRAPHIC COORDINATES: 61-23-48N 029-47-02E	[redacted]

MAP REFERENCE
ACIC. US Air Target Chart 200, Sheet M0103-20HL, 4th ed, May 67, Scale 1:200,000 (SECRET/

25X1 [redacted]

LATEST IMAGERY USED	NEGATION DATE (If required)
25X1 [redacted]	[redacted] 25X1

ABSTRACT

Elisenvaara Low Altitude Air Warning Radar Facility is one of 23 low altitude air warning facilities surrounding Leningrad. This H-shaped radar site is a link in a chain of seven facilities forming the Leningrad outer ring. This facility, which consists of an operational radar area, a VHF communications area, and a support/communications area, apparently became operational in 1966. 25X1

This report provides a detailed imagery-derived analysis of the facility from [redacted]

25X1 [redacted]

INTRODUCTION

Elisenvaara Low Altitude Air Warning Radar Facility is located 1 nautical mile (nm) southeast of Elisenvaarra and 89 nm northwest of Leningrad, USSR (Figure 1). Twenty-three low altitude air warning radar facilities form non-concentric rings surrounding Leningrad. The outer ring, on which the Elisenvaara Low Altitude Air Warning Radar Facility is located, has a radius of 100 nm and a separation of 50 nm between sites. The inner ring has a radius of 60 nm and a separation of 35 nm between sites. The first low altitude air warning radar facility was identified on overhead photography in [redacted] and 25X1 the other facilities were identified between [redacted] 25X1

The terrain north of Elisenvaara is relatively hilly and heavily wooded. The radar site has an elevation of 200 feet. Two hills north of Elisenvaara are 352 and 367 feet high. The majority of the trees surrounding the radar facility range from 55 to 75 feet in height.

BASIC DESCRIPTION

Physical Features

This facility consists of an operational radar area, a VHF communications area, and a support/communications area which contains VHF communications equipment.

The operational radar area (Figure 1) is enclosed by a security fence and is typically H-shaped. There are two SQUAT EYE radars at one end of the H and two THIN SKIN radars at the other end. The two THIN SKIN radars are mounted atop 100-foot-high 25X1 lattice towers and are [redacted] apart. The two revetted SQUAT EYE radars are mounted 25X1 atop [redacted] pole masts and are [redacted] apart. A support van is adjacent to each SQUAT EYE radar. The distance between the SQUAT EYE and the THIN SKIN radars is [redacted] 25X1 25X1 [redacted] In the center of the H is a revetment containing four radar vans with transmission lines leading from the vans to the radars. Earth-covered fuel tanks are adjacent to the four vans. Adjacent to the H-shaped area are two generator vans, one administration/security building, and four electronics vans.

The communications antennas for this facility are located in the VHF communications area and the support/communications area. The VHF communications area is 2,260 feet northwest of the operational radar area and consists of four FORK REST-type VHF antennas, each with a propagation azimuth of 220 degrees. Their probable correspondents are Vyborg and Lypovka. Vyborg is located 66 nm from the Elisenvaara facility on an azimuth of 225 degrees. Lipovka is located 38 nm from the Elisenvaara facility on an 25X1 azimuth of [redacted] Two communications vans are associated with these four antennas.

The support/communications area (Figure 1) consists of two FORK REST-type VHF antennas with a propagation azimuth of [redacted] The probable correspondents are 25X1

25X1 [redacted] 25X1

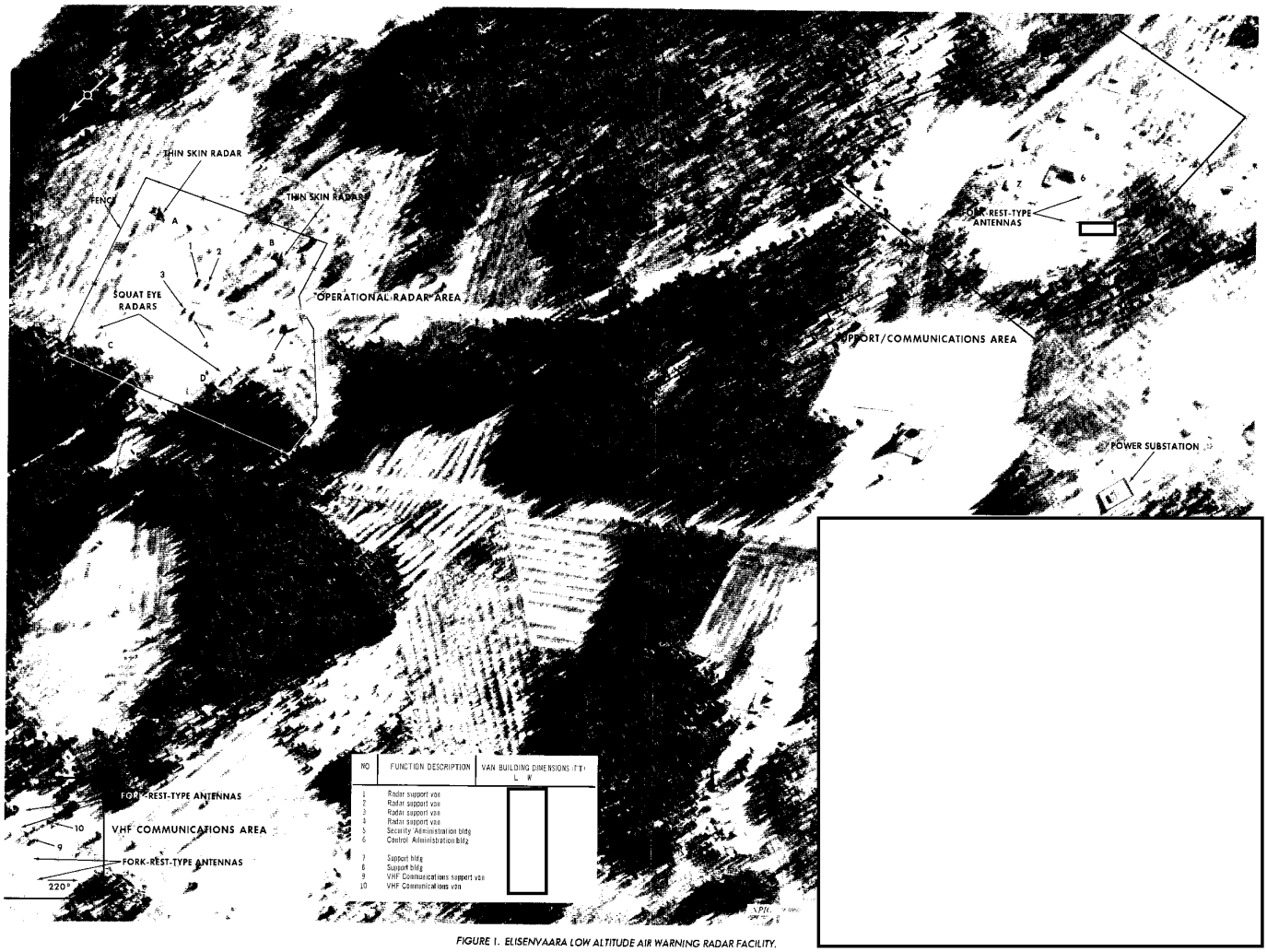

FIGURE 1. ELISENVAARA LOW ALTITUDE AIR WARNING RADAR FACILITY.

Lipovka and Vyborg. A power substation located near the support/communications area supplies power to both the support/communications area and the operational radar area. The support/communications area contains a heating plant, an administration/control building, ten support buildings, and three small earth-covered bunkers. A rectangular fenced area encloses 30 horizontal fuel tanks.

Operational Function

The purpose of this facility is low-altitude air warning, and it is one of seven low altitude radar facilities in the outer ring around Leningrad.

Status and Activity

Mission	Date	Status
25X1		Negation.
		Midstage of construction. H-configuration evident.
		Late stage of construction. One radar tower present.
		Facility appears complete; however, identification of equipment cannot be made.

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25X1 REFERENCES

MAPS OR CHARTS

25X1 ACIC. US Air Target Chart 200, Sheet M0103-20HL, 4th ed, May 67, Scale 1:200,000 (SECRET/ 25X1

REQUIREMENT

COMIREX BR-C/005-69
NPIC Project 210631